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Appl. No. 09/990,189
Amdt. dated Apr. 23, 2004
Reply to Office Action of Dec. 23, 2003

REMARKS

In the Office Action, claims 1, 5, 10-12, 16, 17, 18, and 22 were rejected under 35 U.S.C. § 102(b), as allegedly anticipated by Japanese Patent No. JP408300363A to Yamaguchi (the "Yamaguchi patent"), and claims 1-6, 8, 10-18, 21, 22, and 24 were rejected under 35 U.S.C. § 102(b), as allegedly anticipated by U.S. Patent No. 5,849, 237 to Inoue (the "Inoue patent"). Further, remaining claims 7, 9, 19, 20, and 23 were rejected under 35 U.S.C. § 103(a), as allegedly unpatentable over various combinations of the Yamaguchi patent, the Inoue patent, U.S. Patent No. 5,061,427 to Hirzel (the "Hirzel patent"), U.S. Patent No. 6,422,850 to Shannon et al. (the "Shannon patent"), an *About Texturing* reference, and a *Mold-Making Handbook* reference. Applicants respectfully traverse these rejections.

By this Amendment, independent claim 1 has been amended to recite features previously set forth in dependent claim 2, and claim 2 has been canceled. Independent claims 23 and 24 have been amended in a manner similar to independent claim 1. In addition, claim 3 has been amended to now depend directly from independent claim 1. Thus, 23 claims are presented for reconsideration, including amended independent claims 1 and its dependent claims 3-22 and amended independent claims 23 and 24.

Independent claim 1 defines a mold configured for use in preparing a portion of a golf ball, wherein the mold comprises a contact region configured to contact ball material during preparation of the golf ball portion, and wherein the contact region comprises porous metal. In addition, claim 1 has now been amended to specify that the porous metal has a porosity "between about 5% and about 50% by volume," as previously recited in dependent claim 2.

In the Office Action, the only rejection of original dependent claim 2 was based on alleged anticipation by the Inoue patent. In rejecting claim 2, the Examiner asserted, "Inoue teaches a compression or injection mild for forming a golf [sic - ball] comprising: a sintered porous metal alloy having a pore size of from [sic] preferably 5-15 microns . . .," and he further asserted, "[i]t is inherent that the mold having an overlapping pore size as claimed also has a porosity that falls between the ranges as claimed."

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Applicants respectfully disagree. It is not "inherent" that a mold having a pore size similar to that of another mold will also have the same porosity. Pore size and porosity are different parameters, not necessarily directly related to each other.

The presence of pores in a material, of course, is what leads to the material's porosity. However, the *size* of those pores does *not* necessarily correlate with the *magnitude* of such porosity. Two different porous materials can have similar-sized pores, but vastly different porosities. This is because porosity is determined not only by the size (i.e., diameter) of the pores, but also by the *lengths* of the pores and by the *concentration* of the pores within the material. Thus, the Inoue patent's disclosure of a material having pores in a size range of 5 to 15 microns could have a porosity entirely outside the claimed range of "between about 5% and about 50%."

For this reason, the anticipation rejection of original dependent claim 2 is improper. Accordingly, the anticipation rejection of independent claim 1, which has now been amended to incorporate the porosity range feature of original dependent claim 2, is improper and should be withdrawn.

None of the remaining references of record make up for the deficiency of the Inoue patent in failing to disclose a mold formed of a porous metal having a porosity in the range of "between about 5% and about 50%." Accordingly, independent claim 1, as amended, defines a patentable advance over all of the references of record and should be allowed.

Claims 3-22 all depend from amended independent claim 1, more particularly defining the mold of the invention and further distinguishing over the cited references. For this reason and for the reasons set forth above with respect to claim 1, all of claims 3-22 should be allowed.

Independent claim 23 defines a method for forming a golf ball portion, including steps of (1) preparing a mold of a porous metal, (2) using a vacuum device to reduce the mold's exterior pressure below the mold's interior pressure sufficient to increase gas flow through the porous metal, from the interior space to the exterior space, and (3) placing ball material into the mold to form the golf ball portion, so that gas flows from the interior space to the exterior space.

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In addition, claim 23 has now been amended to specify that the mold material has "a porosity between about 5% and about 50% by volume." This is the same feature as was added to independent claim 1, discussed above. For the reasons set forth above with respect to claim 1, the cited references, taken either alone or in combination, fail to disclose this method. Independent claim 23, as amended, should be allowed.

Independent claim 24 defines a method for forming a golf ball portion, including steps of (1) preparing a mold of a porous metal, (2) placing ball material into the mold, and (3) using a pressurizing device to increase the mold's exterior pressure above the mold's interior pressure sufficient to improve release of the molded golf ball portion from the mold. In addition, claim 24 has now been amended to specify that the mold material has "a porosity between about 5% and about 50% by volume." This is the same feature as was added to independent claim 1, discussed above. For the reasons set forth above with respect to claim 1, the cited references, taken either alone or in combination, fail to disclose this method. Independent claim 24, as amended, should be allowed.

The foregoing amendments and remarks should place this application in condition for allowance. If the Examiner believes that a telephone conference with Applicants' undersigned representative might expedite the prosecution of this application, he is respectfully requested to call at the telephone number indicated below.

Date: April 23, 2004

Respectfully submitted,

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